Amendments to the Specification:

Please amend the paragraph bridging pages 8-9 as follows:

Referring to Figs. 1 and 2, a measuring element 1 comprises a semiconductor substrate 2 made of, e.g., silicon and having a cavity 4 formed by anisotropic etching to extend upward from a lower surface of the substrate to a boundary with respect to an electric insulating film 3a, and a heating resistor 5 formed on the electric insulating film 3a that covers the cavity 4. The measuring element 1 further comprises a temperature compensation resistor 6a for performing temperature compensation of the heating resistor 5, a first resistor 7, and a second resistor 8, the first and second resistors forming a bridge circuit in combination with the heating resistor 5 and the temperature compensation resistor 6a.